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REMARKS

Claims 1-20 are pending in the application. All claims stand rejected.

With regard to the provisional obviousness type double-patenting rejection set forth in paragraphs 2 and 3 of the Office Action, Applicants submit herewith a Terminal Disclaimer disclaiming that portion of the term of the present application in view of co-pending application serial no. 10/707,368 (Attorney Docket No. 81092489 FGT 1890 PA).

With regard to the claim objections set forth in paragraph 4 of the Office Action, Applicants have made several clarifying amendments as suggested in the Office Action to overcome these objections.

With regard to the rejections of claims 1-9 under 35 U.S.C. §112, second paragraph for indefiniteness, Applicants have made a clarifying amendment to independent claim 1. Specifically, Applicants have properly recited the initial steering wheel angle input to overcome the antecedent basis rejections set forth in the Office Action. Further, this feature of independent claim 1 is supported in the specification at paragraphs [0029] and [0031]. Accordingly, in view of this clarifying amendment, Applicants respectfully request that the rejections under 35 U.S.C. §112 be withdrawn.

With regard to the rejection under 35 U.S.C. §101 set forth in paragraph 7 of the Office Action, Applicants have amended claim 10 to positively recite a tangible way in which the method steps are operated. Specifically, the method steps are operated on a digital computer system, and the results of the operating steps are output in a useful, tangible and concrete manner. Examples of various outputs for the computer models are described in paragraphs [0023] and [0025] of the specification. Accordingly, Applicants respectfully request that the rejections under 35 U.S.C. §101 be withdrawn.

Claims 1-20 stand rejected under 35 U.S.C. §103 as being unpatentable over Sharp in view of Taylor. According to the Office Action, it would have been obvious to one of skill in the art to modify Sharp's steering control system with Taylor's method for determining the look-ahead distance in order to achieve a system that reconfigures the look-ahead distance when a threshold with a rear side slip angle is exceeded. Applicants traverse these rejections on several grounds.

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As an initial matter, the Sharp reference concerns an optimized model for three different steering control situations. As noted in the Office Action, Sharp does not disclose using a threshold value of the rear side slip angle to determine a look-ahead scale factor. Indeed, Applicants traverse the suggestion in the Office Action that Sharp discloses a side factor as claimed herein at all. A careful reading of the Sharp reference reveals that the "preview time" disclosed therein does not vary as a function of side slip angle or anything other than vehicle speed. The preview time discussed in Sharp differs based upon the priority of the following variables: attitude angle control, path tracking, and steering input. Depending upon how these variables are prioritized, the preview time will vary. Critically, however, the preview time does not vary within any given priority model for any variable other than vehicle speed. Thus, as explained in Sharp, when path following precision is given the highest priority (referred to as system (a) in Sharp), about one second of preview time is all that is needed at low speeds and about 1.5 seconds is sufficient at high speeds (page 10, second full paragraph). However, when priority is placed on attitude angle control, shortened preview times are permissible (system (b) in Sharp). Finally, when steering input is of greatest concern, much longer preview times, i.e., on the order of 8 seconds, are necessary. Importantly, however, no portion of the Sharp disclosure teaches or suggests scaling the preview time.

Nor does Taylor teach determining the look ahead scale factor when the rear side slip angle is greater than a threshold, as asserted in the Office Action. Specifically, the portions of the Taylor reference relied upon in the Office Action do not support this assertion. Section 3.3.4 of the Taylor reference concerns only processor delay as it relates to look ahead distance and overall system stability. Critically, there is no mention of side slip angle as it relates to processor delay or look ahead distance. Applicants can find no support in the Taylor reference whatsoever for the assertion in the Office Action that Taylor teaches a look ahead scale factor which is modified when the rear side slip angle is greater than the threshold as required by each of the independent claims.

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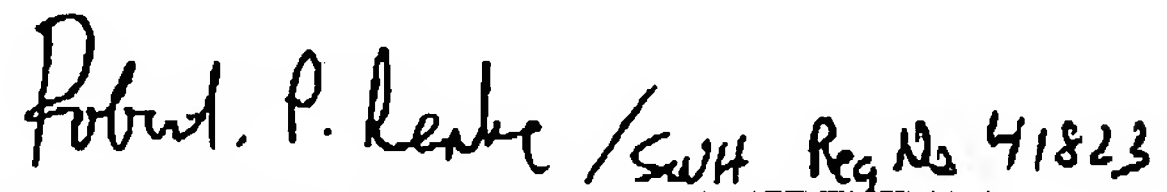
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Accordingly, Applicants respectfully request that the rejections under 35 U.S.C. §103 be withdrawn because the references relied upon, either alone or in combination, fail to disclose or suggest at least the following features of independent claims 1, 10 and 19: when the rear side slip angle is greater than a threshold, determining a look ahead scale factor; and when the rear side slip angle is greater than the threshold, increasing the look ahead point as a function of the look ahead scale factor. For at least these same reasons, dependent claims 2-9, 11-18 and 20 are also allowable over the cited prior art.

Having overcome all of the objections and rejections set forth in the Office Action, Applicants submit that claims 1-20 are in a condition for allowance. A Notice of Allowance indicating the same is therefore earnestly solicited. The Examiner is invited to telephone the Applicants' undersigned attorney at (248) 223-9500 if any unresolved matters remain.

Respectfully Submitted,

ARTZ & ARTZ P.C.Handwritten signature of Robert P. Renke, with "SWH" and "Reg No 41823" written next to it.

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